ENTOMOLOGICAL ITEMS.

Strawberry plants are damaged in parts of Michigan by *Otiorhynchus ligneus*.

We are sorry to note that *Science record*, which its editor, Mr. J: S. Kingsley, has lately improved in many respects, has suspended publication.

F. Minà-Palumbo, in an article concluded in the October-November numero of *Il naturalista siciliano*, enumerates 301 species of European lepidoptera which feed on oak.

The entomological club "Iris," in Dresden, has just reawakened to new activity and we are in receipt of numero one of its "Correspondenzblatt" issued for October 1884.

Dr. August Weismann of Freiburg has been nominated as successor of Prof. K. T. von Siebold in the University of Münich. Prof. von Siebold has been made an *emeritus*.

At the June (1883) meeting of the Linnean society of New South Wales, Mr. Deane exhibited sandstone penetrated by burrows apparently dug by some hymenopterous insect.

A new locality reported to be infected by phylloxera is in the vicinity of Caltagirone, in Sicily. The same insect has been found near Linz, a town on the Rhine not far from Coblenz.

Dr. W. G. Stevenson reports, in the Transactions of the Vassar brothers institute, 1883-1884, v. 2, p. 135, a capture of *Papilio turnus* var. *glaucus* at Poughkeepsie, N. Y., in August 1882.

Phylloxera has made its appearance in the Pomological institute of Proskau (Silesia). It is hoped, however, that the spread of the disease may yet be prevented.—*Science*, 21 Nov. 1884, v. 4, p. 481.

Miss Jennie M. Arms, teacher of natural history in Boston, Mass., read a paper on "Observation lessons on insects," at the fortieth annual meeting of the Massachusetts teachers' association, 29 to 31 December 1884, in Boston, Mass.

One copy of no. 4 of vol 2 of *American entomologist* wanted. Also one copy of C: V. Riley's 6th annual report of the state entomologist of Missouri. Riley's 3d report offered in exchange or for sale. Address, stating price, B: Pickman Mann, Washington, D. C.

In the meeting of the Entomological society of London, on 1 Oct. 1884, Baron C: R. Osten Sacken communicated "Facts concerning the importation, or non-importation of diptera into distant lands" in which considerable curious information about North American diptera was given.

Exchange of European and American coleoptera.—Mr. C. F. Lange, of Annaberg, in Saxony, offers to exchange European for American coleoptera, and refers to Mr. John B. Smith, 290 3d avenue, Brooklyn, N. Y., to certify that his specimens are well prepared and correctly named.

Mr. S. H. Scudder's memoir upon Dr. J: L. LeConte, read before the National academy of sciences, 17 April 1884, published in vol. 11 of the Transactions of the American entomological society and as a separate, contains a fine portrait of Dr. LeConte and an account of the ancestry of his family.

Mr. H. Donckier de Donceel gives a list of the *anthribidae* described since the publication of Gemminger and Harold's catalog of coleoptera, in the Compte-rendu of the Belgian entomological society for 8 Nov. 1884. Twenty-four new species and ten new genera are accredited to North America.

Sandstone has been found perforated in all directions and to a considerable depth by an undetermined species of bee in New

South Wales. Mr. J. Norton exhibited specimens of this perforated sandstone, from Springwood, Blue Mountains, at the July meeting of the Linnean society of New South Wales.

Mr. A. C. Horner notes in the *Entomologist* for October 1884 that *Pterostichus melanarius*, an English species, attacks strawberries, and T. H. Hart, in the November numero of the same periodical, among other notes on phytophagic *carabidae*, mentions having seen "three specimens of *Carabus violaceus* disputing possession of a half-rotten apple."

In a paper read before the Linnean society of New South Wales, Oct. 29 last, Dr. Lendenfeld contests the views of the French physiologists, that the position and movements of the wings of insects are merely the results of the mechanical influence of the resisting air, and gives instances where muscular contraction had been clearly proved.— *Science*, 19 Dec. 1884, v. 4, p. 562.

At the June meeting of the Linnean society of New South Wales, Mr. William Macleay exhibited, on behalf of Mr. Wilkinson, "a number of *Helix*-like shells, wound spirally round the leaf-stalks of a species of Eucalyptus, at Branxton, on the Hunter. These shells, though calcareous, were pronounced not to be the production of any molluscous animal, and the general opinion was that they must be egg-cases of some insect."

Mr. James J. Walker reports, in the *Entomologist's monthly magazine* for Dec. 1884, that he found *Dermestes vulpinus*, *Necrobia rufipes*, *Corynetes violaceus* and *Alphitobius piceus* in amazing abundance in a bone-boiling establishment in Sheppey, England. The first species literally blackened the whitewashed walls of the rooms, and their larvae did much damage by riddling the woodwork of the building with holes in which they pupated.

The composition and properties of the light emitted by insects of the Pyrophore genus form the subject of a paper recently presented to the Paris academy of sciences by Aubert and P. Dubois. The spectrum of the light, examined by the spectroscope, is very beautiful, but destitute of dark bands. When, however, the intensity diminishes, the red and orange disappear, and the green and yellow only remain.— *Science*, 28 Nov. 1884, v. 4, p. 505.

Prof. A. J. Cook read a paper before the Natural-history society of the Michigan agricultural college, on 12 Sept., on extra-floral nectar. "Bees had been noticed to be extensively at work on the heads of grasses. These proved to be covered with the sweetish secretion due to ergot. The honey made from this material was very agreeable to the taste, ranking with the best, while honey made from the secretions of plant-lice is often very poor and disagreeable."

According to *Science* for 21 Nov. 1884 (Bulletin, p. 5), at the meeting of the Trenton natural-history society "Prof. Austin C. Apgar detailed his experiments with naphthalin on *Anthrenus scrophulariae*. Larvae left an infested object, and for two weeks lived in an air-tight case, in vapor so dense that it crystallized on the cover-glass. Even then they only apparently died, for, on removal, one revived and walked away. Herbarium mites were killed in half an hour in a tumbler loosely covered."

The prize offered by M. Adrien Dollfus for anatomical work on insects (see Psyche, May 1884, v. 4, p. 175) was divided between Ph. François, of Poitiers, and A. Lameere, of Brussels, whose papers were judged equally worthy of the prize. M. François' paper treated of the anatomy of the larva of *Vanessa polychloros*, and was published, with a plate, in the *Feuille des jeunes naturalistes* for November 1884; Mr. Lameere described the anatomy of the larva of *Lasio-*

campa potatoria, and his article appears in the December numero of the same periodical. *G. D.*

Miss Mary H. Hinckley, in her "Notes on the peeping frog, *Hyla pickeringii*, Leconte" (Mem. Bost. soc. nat. hist., May 1884. v. 3, no. 10). p. 317, writes in regard to enemies of this species that the tadpoles "are constantly being lessened in number by their enemies, the newts, water beetles, and the larvae of the beetles and dragon flies. On two occasions I have seen a spider (*Dolomedes sexpunctatus*) run along the surface of the water, suddenly dive, seize, and drag out on land a full-grown tadpole of this species; the spider coming out dry, evidently as much at home in as out of water."

In the new Hungarian entomological periodical, *Rovartani lapok* (v. 1, p. 171; Resumé, p. 2), Dr. O. Tómósváry records his observations "that two myriapods in captivity, a *Lithobius forficatus* and a *Geophilus foveolatus*, attacked each other with violence but soon withdrew. The latter species, during the attack and retreat, emitted from the extremity of its abdomen a light of bluish violet color, feeble, but nevertheless very perceptible in obscure light. This luminosity was visible scarcely a minute because the shining animal hid itself beneath the leaves at the bottom of its prison."

At the October meeting of the Natural science association of Staten Island, Mr. Davis exhibited a specimen of one of our green grasshoppers, *Conocephalus dissimilis*, which he had found without any head, and stridulating while perched upon a blade of grass. When touched by the finger, the insect did not close its wings tightly, as usual, but let them remain far apart. It had evidently not been long decapitated: for, when captured, the muscles in the thorax had their normal appearance. But gradually the tissues dried, and on the third day of its captivity it died without having stridulated again, though every means thought of was employed to induce it.—*Science*, 7 Nov. 1884, v. 4, p. 448.

The investigations of M. Carlet enable him to affirm that the poison-apparatus of the hymenoptera is always composed of two distinct glandular systems, the one with a strongly acid, the other with a feebly alkaline secretion. These two systems unite at the sheath of the sting. The resultant venom is always acid. The action of this venom upon some animals, as rabbits, frogs and certain beetles, is slight, but the domestic fly and the flesh fly are killed immediately by it. The inoculation of a fly with the secretion of one of the glands does not produce death until after a considerable time, but death follows very quickly if the same fly is subjected to a second inoculation, this time with the secretion of the other gland.—*Amer. nat.*, Dec. 1884. v. 18, p. 1270.

According to J. Murie's report of the meeting of the Linnean society of London, 7 Feb. 1884, printed in the *Zoologischer anzeiger* for 3 March 1884, "Mr. B. J. Lowne gave an interesting communication embodying his researches on the compound vision of insects. He compares the structures of the simple ocellus with those of the compound ocellus (common in larval insects) and with those of the compound eye. The compound eye according to him is but composed of aggregated compound ocelli, or the latter in the larval insect is merely equivalent to a single segment of a compound eye. He refers to the development of the compound eye and points out that in many larvae during molting stages the "segregate" retina is finally replaced by another. He describes a deep spindle-like layer in intimate connection with the nervous structures and which he regards as playing an important part in the phenomena of compound vision, rather than that this kind of vision is solely dependent on the number of corneal facets."

Mr. Wood Mason of the Calcutta Indian museum has recently drawn up a report on

those insects from which the tea-gardens of Assam most suffer. He says the tea-bug or 'mosquito-blight,' and the tea-mite or 'red spider,' are the only two insects which are at present known to do such injury as to materially diminish the profits of the owners. Both these insects pass their whole lives on the tea-plant, and have never been found on any other plant. Such, at least, is the result of the most careful investigation. The mite lives in societies on the upper portion of the full-grown leaves, beneath an exceedingly delicate web which it spins for itself as a shelter. It punctures the leaves, and then pumps out the liquid contents of the epidermis. The only remedy which has been discovered to check their ravages, and it has not proved very effectual, is to sprinkle the affected bushes with muddy water. The tea-bug is still more destructive, and particularly to the trees of the milder juice; for those which afford a strong and rasping liquor enjoy an almost complete immunity from its attack. Mr. Wood Mason appends to his report engravings of these destructive creatures.—*Science*, 31 Oct. 1884, v. 4, p. 426.

At the meeting of the French entomological society held 23 July 1884, M. G. A. Poujade made the following remarks:

"Prof. Édouard Bureau has stated (Ann. soc. entom. Fr., 1854; Bull., p. 22) that in lepidoptera of the genus *Brephos*, specimens which had been dried six days showed evident spontaneous movements of the genital organs, which continued two days, but toward the last part of the time these movements were only produced when the extremity of the abdomen was touched. I have observed the same peculiarity in a *Rhodocera rhamni*, the extremity of the abdomen still moving when the rest of the insect was perfectly dry.

A few days ago some one gave me a male *Lucanus cervus* which had been killed with vinegar five or six days before; the flabbiness of the joints left no doubt as to the death of the animal,—the penis alone, which was partly exserted, had very evident movements which lasted two or three days longer.

These facts, as M. Bureau has said, prove the predominance of the genital functions above all other functions, and it is not without interest to compare these observations with another well-known fact, the prolongation of life among insects that have not paired."

Among naturalists who have been more or less interested in entomology we have lately noticed announcements of the following deaths: Dr. Alfred Edmund Brehm, born in 1829, in Renthendorf, Germany, where he died 11 Nov. 1884; well-known as the editor of the "Illustrirtes thierleben." Dr. Ernst Carstanjen, professor of chemistry in Leipzig university and lepidopterist, died 13 July 1884, in the forty-ninth year of his age. Auguste Chevrolat, a Parisian coleopterist and author of many entomological papers, died 16 Dec. 1884, in the eighty-sixth year of his age. O. J. Fahraeus, a coleopterist of Stockholm, Sweden, died in that place, 28 May 1884, aged eighty-eight. Leopold Joseph Fitzinger, zoologist, born 13 April 1802, in Vienna, Austria, died 22 Sept. 1884, in Hietzing, near Vienna. Dr. Arnold Förster, professor in Aachen, Germany, and hymenopterist, born 21 Jan. 1810, in Aachen, died 13 Aug. 1884, in the same place. A. Keferstein, lepidopterist, died 28 Nov. 1884, in Erfurt, Germany. Johann Gottfried Gottlieb Mühlig, lepidopterist, died 12 April 1884, at Frankfort-a.-Main, Germany, nearly seventy-two years old. Joseph Antoine Maximilian Perty, professor from 1834-1875 in the university at Berne, Switzerland, died at Berne, 8 Aug. 1884, nearly eighty years old. Edmond Tömösváry, a Hungarian naturalist, died 18 Aug. 1884, at Deva. Ernst Wehncke, a merchant in Harburg, Germany, and a specialist in *dytiscidae* and *hydrophilidae*, born 15 March 1835, died 19 Nov. 1883, in Harburg.

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